UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/565,610	01/23/2006	Daniel R. Smith	0275G-001165/US/NP	2649
	7590 05/19/200 CKEY & PIERCE, P.L	EXAMINER		
P.O. BOX 828			OMGBA, ESSAMA	
BLOOMFIELD HILLS, MI 48303			ART UNIT	PAPER NUMBER
			3726	
			MAIL DATE	DELIVERY MODE
			05/19/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)			
	10/565,610	SMITH ET AL.			
Office Action Summary	Examiner	Art Unit			
	Essama Omgba	3726			
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the c	orrespondence address			
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.1: after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period v  - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tin vill apply and will expire SIX (6) MONTHS from , cause the application to become ABANDONE	lely filed the mailing date of this communication. (35 U.S.C. § 133).			
Status					
Responsive to communication(s) filed on 16 Ju     This action is <b>FINAL</b> . 2b) ☑ This     Since this application is in condition for allowar closed in accordance with the practice under E	action is non-final.				
Disposition of Claims					
4) Claim(s) 1-18 is/are pending in the application.  4a) Of the above claim(s) 11-18 is/are withdraw  5) Claim(s) is/are allowed.  6) Claim(s) 1-10 is/are rejected.  7) Claim(s) is/are objected to.  8) Claim(s) are subject to restriction and/o  Application Papers  9) The specification is objected to by the Examine  10) The drawing(s) filed on is/are: a) access applicant may not request that any objection to the specificant of the specific and specific to the specific and specific and specific to the specific and specific and specific to the specific and specific	vn from consideration.  r election requirement.  r.  epted or b)  objected to by the Edrawing(s) be held in abeyance. See	e 37 CFR 1.85(a).			
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.					
Priority under 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.					
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 1/23/2006 & 5/3/2007.	4)  Interview Summary Paper No(s)/Mail Da 5)  Notice of Informal P 6)  Other:	ite			

Application/Control Number: 10/565,610 Page 2

Art Unit: 3726

#### **DETAILED ACTION**

### Election/Restrictions

1. Applicant's election without traverse of the invention of Group I, claims 1-10, in the reply filed on July 16, 2008 is acknowledged.

# Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 3. Claims 1, 3 and 7-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Denham et al. (GB 2 401 661).

With regards to claim 1, Denham et al. discloses a method of connecting together at least two workpieces using a blind rivet (page 1, lines 3-11), the method comprising positioning the at least two workpieces (2, 32) in abutment (fig. 2A0, positioning a blind side end face of a blind rivet against a first one of the workpieces (fig. 2A0 and applying a biasing force thereto, rotating the rivet at a speed while maintaining the biasing force (page 3, lines 28-32, page 5, lines 1-4 and page 6, lines 1-3), utilizing the biasing force to drive the rotating blind rivet through the resultant heat weakened workpieces (page 3, lines 34-36), stopping rotation of the inserted rivet and setting the blind rivet to compress the workpieces between a deformed portion (31) of the rivet body and a flange portion (13) (page 4, lines 11-17).

Regarding claim 3, Applicant should note that it is inherent that the biasing force in Denham et al. is less than that required to force the blind rivet through the non-weakened workpiece.

Regarding claim 7, see page 1, lines 20-21. Applicant should note that the teeth provide an abrasive surface.

Regarding claims 8 and 9, see figure 2A.

Regarding claim 10, Applicant should note that the same tool is used to rotate and set the blind rivet in the Denham et al. method.

## Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claims 2 and 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Denham et al.

Denham et al. discloses a method of connecting together at least two workpieces as shown above. Although Denham et al. does not specifically disclose a speed of rotation of the rivet or the magnitude of the biasing force, however it would have been obvious to one of ordinary skill in the art at the time the invention was made that such rotation speed and force magnitude would be a function of the materials of the workpieces to be connected, and it is within the general skill level of a worker in the art

Application/Control Number: 10/565,610 Page 4

Art Unit: 3726

to determine the optimum rotational speed of the rivet that would generate sufficient heat to adequately locally soften the workpieces and the effective force magnitude required to force the blind rivet through the heat weakened workpieces.

### Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Essama Omgba whose telephone number is (571) 272-4532. The examiner can normally be reached on M-F 9-6:30, 1st Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bryant can be reached on (571) 272-4526. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number: 10/565,610 Page 5

Art Unit: 3726

/Essama Omgba/ Primary Examiner, Art Unit 3726

eo May 15, 2009